

Penny Sliding Lab
AP Physics
24 Points total

The goal of this lab is to experimentally determine the relationship between displacement in the x-direction and the time of flight of a penny. Students will be given a stopwatch, measuring tape, and a penny, and from these tools they will collect data and graph the appropriate variables. Calculations must include the initial velocity of the penny and time it takes for the penny to hit the floor.

Rubric:

1. Procedure (3 points). This is a list of what you did to take your data.
2. Data table (5 points). Make this neat and complete and have a minimum of seven trials.
3. Graph (5 points). Make this neat and complete, and include a function of best fit.
4. Calculations (3 points). Show one full calculation, and the rest of the calculations may be done from the equation in the full calculation.
5. Sources of error (2 points) and ways to minimize sources of error (2 points).
6. Conclusion (4 points). Write a few sentences describing what you did, what your conclusion(s) are, and why you concluded what you did.